

SPECIFICATION

TITLE: GUN SLING

INVENTOR: NICK KAKOURAS

RELATED APPLICATIONS

- [01] This application claims the benefit of U.S. Provisional Application Ser. No. 60/431,302 that was filed December 6, 2002.

BACKGROUND OF THE INVENTION

- [02] The present invention is to a gun sling for rifles and shotguns that is comfortable and easy to use. The sling can be used to carry a gun in the ordinary manner, over one shoulder, or “backpack-style” over two shoulders. When carried over two shoulders, the sling of the present invention intuitively adjusts more easily for better user comfort.
- [03] Numerous prior art gun slings have been developed for comfortable use over one shoulder. U.S. Patent No. Des. 266,180 to *Dickinson et al.* discloses a sling that is adjustable in length and has a padded portion for engaging a shoulder at a top end thereof. These designs usually suffer from cumbersome length adjustment when configuring the sling due to the different bulkiness of various outerwear items. Additionally, since all the weight of the gun is supported by one shoulder, users must either constantly move the gun from one shoulder to the other or suffer fatigue on one shoulder.
- [04] Numerous other prior art gun slings have been developed for comfortable use over two shoulders. U.S. Patent No. 2,715,989 to *Sjodin et al.* discloses a shoulder harness for carrying a rifle over both shoulders. The unit suffers from placement of the adjustment

buckles at the shoulder and a lack of padding, both of which can make the harness uncomfortable in use. Additionally, the stock-embracing strap can interfere with the gun operation and the harness is not meant to be used comfortably over a single shoulder when the gun is transported shorter distances.

[05] U.S. Patent No. 3,595,451 to *Branby* discloses a gun sling that can be used over one or both shoulders by use of a sliding member. However, because the sling must be able to pass through the sliding member, it cannot employ any padding at the shoulder position, leading to discomfort during extended use. The dual function of the sling is not readily apparent or intuitive to new users.

[06] U.S. Patent No. 4,817,835 to *Tarr, Jr.* discloses a gun sling that can be used over one or both shoulders by use of a long strap that is split longitudinally. The design of the length adjustment mechanism is non-intuitive and does not allow separate adjustment of each strap and again, this design does not employ any padding at the shoulder position, leading to discomfort during extended use.

[07] U.S. Patent No. 5,282,558 to *Martinez.* discloses a gun sling that can be used over one or both shoulders by use of a primary strap and an auxiliary strap. The design of the length adjustment mechanism does not allow quick adjustment of the primary strap and the auxiliary strap is limited to a few pre-set positions. This design positions the gun to one side of the user and does not employ any padding at the shoulder position of the auxiliary strap, leading to discomfort during extended use. The dual function of the sling is not readily apparent or intuitive to new users.

[08] U.S. Patent No. 5,810,219 to *Rosenfeld* discloses a gun sling that uses a loop attached

to a rifle at two spaced-apart points to allow carrying of the rifle in a backpack position. The design of the length adjustment mechanism does not allow separate adjustment of each strap and again, this design does not employ any padding at the shoulder position, leading to discomfort during extended use. Again, the dual function of the sling is not readily apparent or intuitive to new users.

BRIEF SUMMARY OF THE INVENTION

- [09] The present invention provides a gun sling that can be used over one or both shoulders by use of a pair of padded straps. Each strap is separately adjustable by a sliding clip at a point below the padded shoulder portion for quick and easy operation by the user. The padded portion of each strap can include a fastening means to allow the padded shoulder portions of the gun sling to be attached to each other to facilitate storage and use over one shoulder.
- [10] It is an object of the present invention to provide a gun sling that can provide comfortable use for transporting a gun over either one or both shoulders.
- [11] It is another object of the present invention to provide a gun sling that is easily and quickly adjusted by a user when worn over both shoulders.
- [12] It is a further object of the present invention to provide a gun sling that can quickly adjust for use over either one or both shoulders.
- [13] It is yet another object of the present invention to provide a gun sling for use over either one or both shoulders that is inexpensive to produce.

- [14] It is another object of the present invention to provide a gun sling for use over either one or both shoulders that is intuitive for users to operate.

BRIEF DESCRIPTION OF THE DRAWINGS

- [15] **Figure 1** illustrates an embodiment of the present invention as employed for carrying a gun backpack-style over two shoulders;
- [16] **Figure 2** illustrates an embodiment of the present invention as employed for carrying a gun in the ordinary manner over one shoulder;
- [17] **Figure 3** illustrates one embodiment of a top attachment of the present invention to a standard gun sling swivel wherein both straps go through the swivel and clamp;
- [18] **Figure 4** illustrates another embodiment of a top attachment of the present invention to a standard gun sling swivel wherein the straps are joined together and a single strap goes through the swivel and clamp;
- [19] **Figure 5** illustrates a modified gun sling swivel for use with the present invention that has a triangular loop to allow attachment of two straps to a single swivel;
- [20] **Figure 6** illustrates a modified gun sling swivel for use with the present invention that includes a plate with two slots to allow attachment of two straps to a single swivel;
- [21] **Figure 7** illustrates a Y-strap for use with the present invention for attaching two straps to a lower gun sling swivel.

DETAILED DESCRIPTION OF THE INVENTION

- [22] A basic embodiment of the present invention as deployed in a position for use over two shoulders is illustrated in **figure 1**. The gun sling **10** includes two straps **12, 13** for attaching, via various means, to upper and a lower gun sling swivels (not illustrated) on the gun to be carried. Each strap **12, 13** includes a padded portion **14, 15** at an upper end for engaging a shoulder when in use. Although illustrated as a separate component from the strap portion, the padded portions may be integral with the strap, sewn to the strap, attached by belt-loops, etc., such that the present invention is not meant to be limited by the illustration.
- [23] In a preferred embodiment, each padded portion includes one side of an attachment means **16** to enable the padded portions **14, 15** of each strap **12, 13** to be joined together to form the embodiment of the present invention used for carrying a gun on a single shoulder, as illustrated in **figure 2**. Although illustrated as snaps on the padded portions, any suitable attachment means can be used at any appropriate point on the straps, including, but not limited to, hook-and-loop fasteners, magnetic fasteners, button-and-hole fasteners, zippers, Zip-Loc® style strips (i.e., locking plastic strips), and clasp-type fasteners. Plural attachment means may be included where deemed suitable or necessary.
- [24] Below the padded portion **14, 15** of each strap **12, 13**, a sliding clip **18** is included for adjusting the length of each strap **12, 13** individually. The clips **18** are preferably positioned just below the padded portion **14, 15** for easy access by the user when worn backpack-style.
- [25] To minimize cost of the present invention, it may be desirable to use many “off-the-

shelf” components, such as a standard single-strap padded rifle slings. Since the upper portion of the straps do not need to be separately adjustable, it may be desirable to have both straps 32, 33 of two standard slings go through the upper sling swivel 36 and a single clip or clamp 37, as illustrated in **figure 3**. Alternately, both straps 32, 33 can be joined together and a single strap 42 can then go through the upper sling swivel 46 and a single clip or clamp 47, as illustrated in **figure 4**.

[26] Another way that standard, single-strap, padded rifle slings can be used in the present invention is to modify the sling swivel 56 to accommodate two straps 52, 53. **Figure 5** illustrates one way to accomplish this by use of a triangular loop 59 on the sling swivel 56. **Figure 6** illustrates another manner to allow two straps 62, 63 to engage a single swivel 66 by use of two separate slots 68 in a plate 69. These modified sling swivels 66 can be used for the upper and/or lower attachment of the two straps 62, 63.

[27] A Y-strap 70, as illustrated in **figure 7**, can be used at the lower attachment point to allow use of both standard, single-strap, padded rifle slings and a standard sling swivel 76 at the lower attachment point. The Y-strap 70 includes a single strap 72 and clip or clamp 77 at one end to engage the lower sling swivel 76 in the ordinary manner. The other end of the Y-strap includes two straps 73, 74, each terminating with a clip or clamp 78, 79 for engaging the two straps at their respective lower ends. If used, it is preferable that the two straps of the Y-strap be joined close to the lower end and that each of the two straps have equal lengths sufficient (longer than illustrated) to place their respective adjustment clip or clamp 78, 79 in a position that is easily accessed by the user when the unit is being worn backpack-style, i.e. near the bottom of the padded section, as discussed with respect to **figure 1**.

[28] In use, the present invention will be intuitive to use since most users will already be familiar with the operation of standard, single-strap, padded rifle slings. When used in the backpack position, the unit will be adjustable in a manner identical to a backpack (i.e., adjustable straps via sliding clips or clamps just below a padded portion) such that users will intuitively loosen one side to ease removal (i.e., first side released) and attach the unit in the reverse order such that the second strap is already loose to ease slipping it over the second shoulder.